- The enormous expansion of international transmission capacity discussed in the MCI/WorldCom Order.[155]

- The pending AT&T/British Telecom joint venture announced in July 1998.[156]

These procompetitive developments have all occurred in the absence of direct access. And it is not at all clear how substituting INTELSAT in the U.S. for COMSAT will engender more competition or market pressure for lower prices.

4. The Commission's Recent Findings and Current Marketplace Facts Demonstrate That No Need for Level 3 Direct Access Exists

The *Notice* states that a primary rationale for implementing the Commission's direct access proposal is that the measure "may impede COMSAT's ability to earn monopoly rents."[157] This reasoning is plainly erroneous. The FCC already has determined, as set forth in the *Non-Dominance Order*, that COMSAT lacks market power on routes representing 85% to 90% of its traffic. COMSAT's rates on these routes are by definition competitive and

---

(...Continued)

[154] INTELSAT officially transferred five operational satellites, plus a sixth under construction, to New Skies Satellites, N.V. on November 30, 1998. *See, e.g.*, Communications Daily, Dec. 1, 1998.

[155] *See MCI/WorldCom Order* at ¶¶ 86-99.

[156] AT&T and British Telecom announced on July 26, 1998, that they would merge many of their international operations in a $10 billion joint venture. *See generally* "AT&T and British Telecom Merge Overseas Operations," The New York Times, July 27, 1998 at p. A1. The deal still must be approved by both U.S. and European regulators. The Commission has requested interested parties to file comments on the deal. DA-98-2412 (November 27, 1998).

[157] *Notice* at ¶¶ 14, 43.

presumptively lawful—therefore excluding the possibility of unlawful "monopoly rents." Furthermore, COMSAT's rates for service on the so-called "thin" routes are the same as those charged on the competitive "thick" routes and remain subject to Commission regulation.[158] Thus, as a matter of both logic and law, there is no basis for the agency to contend that COMSAT could earn "monopoly rents." Stated differently, the *Notice* is proposing Level 3 direct access as a way to address a problem which simply does not exist.

Moreover, as discussed above and in the Brattle Analysis, implementing the agency's direct access proposal would afford U.S. customers below-cost access to INTELSAT space segment at COMSAT's expense.[159] The Commission has never before required a carrier to lower its rates to sub-competitive levels, and it has no legal authority to order COMSAT to do so now.

a) The FCC Already Has Found that COMSAT's Rates for 90% of Its INTELSAT Services Are Subject to Effective Competition

The FCC's April 1998 *Non-Dominance Order* declares that COMSAT faces effective facilities-based competition for the overwhelming majority of its traffic.[160] Consequently, the

---

158 As noted below, the Commission is currently reviewing COMSAT's proposal in the so-called "incentive-based rate regulation" proceeding to further ensure that all customers on these thin routes enjoy the benefits of competitive thick route pricing. In addition, the FCC's list of thin-route destinations is factually outdated as the number of thin-route countries continues to decline.

159 *See* Brattle Analysis at 13-15.

160 The Commission held that COMSAT was non-dominant in the provision of full-time video services to all markets and in the provision of switched-voice, private line, and occasional-use video services to so-called "thick route" markets. By the end of 1998, traffic

(Continued...)

corporation's rates on those routes are *a fortiori* competitive and presumptively lawful. Given the "unprecedented" decline in COMSAT's share of the U.S. international marketplace in recent years—due largely to the soaring increase in new cable and satellite capacity—the FCC could hardly find otherwise.[161]

The Commission has recognized that COMSAT faces ever-increasing competition from both satellites and from fiber optic cable.[162] As for intermodal competition, the *Non-Dominance Order* notes that fiber-optic cables provided about three times the amount of international circuits offered by all satellite companies, including COMSAT, combined.[163] The ability and willingness of COMSAT's customers to move their traffic to take advantage of the best price and service options available is not in doubt.[164] This record amply refutes any contention that Level 3 direct access is necessary to guarantee that consumers have choices for international transmission capacity.

(...Continued)
on the routes for which COMSAT is still regulated as dominant will account for only about 8% of COMSAT's INTELSAT-based revenues.

161 COMSAT's share of switched voice and private line traffic to and from the United States decreased from an average of 70% in 1988 to less that 21% in 1996 and its share of the U.S. international video market dropped from 80% in 1994 to less than 45% in 1996. *Non-Dominance Order*, 14 FCC Rcd at 14121, 14131, 14134-5.

162 *See* Merrill Lynch, *The Global Satellite Marketplace,* April 1997 (Tables 23 and 31) (showing INTELSAT's shrinking share of total satellite capacity).

163 *Non-Dominance Order*, 13 FCC Rcd at 14131 (less than 19,000 satellite circuits compared to more than 57,000 cable circuits).

164 *Id.* at 14120.

b) COMSAT's Rates on the Declining Number of Thin Routes Also are Competitive Market-Driven Rates

Facts concerning COMSAT's services on thin routes provide no more justification for Level 3 direct access than do the facts on thick routes. While the Commission continues to regard COMSAT as a "dominant" carrier for certain services on certain routes—which currently account for less than 8% of COMSAT's INTELSAT-derived revenues—there is no basis for a determination that the corporation's rates on the ever-shrinking number of thin routes are excessive or otherwise unlawful.

Certainly there has been no showing that COMSAT's thin-route rates are anything other than what the corporation has consistently said they are: the very *same* rates afforded to customers on the highly competitive thick-routes for the same services.[165] In short, users are getting the benefit of facilities-based competition without direct access.[166]

c) The Latest Marketplace Events Further Undercut the Need for Level 3 Direct Access

If the Commission's own recent findings were not enough to eliminate any factual justification for Level 3 direct access, market-driven events since the issuance of the *Non-Dominance Order* reinforce the point dramatically. All of COMSAT's customers, including

---

[165] *See, e.g.*, Petition of COMSAT Corporation for Forbearance from Dominant Carrier Regulation and for Reclassification as a Non-Dominant Carrier, File No. 60-SAT-ISP-97 (filed Apr. 24, 1997).

[166] *See Policies and Rules for Alternative Incentive-Based Regulation of COMSAT Corporation,* IB Docket No. 98-60, Comments of COMSAT Corporation, filed May 29, 1998 ("Incentive Comments"); Reply Comments of COMSAT Corporation, filed June 12, 1998 ("Incentive Reply Comments").

those on routes still formally classified as non-competitive, now have an even more abundant array of service options from which to choose. Were COMSAT's alleged "mark-ups" out of line with those charged by its rivals, customers could freely switch to other options.[167] Highlights are noted below.

Transoceanic cable competition: Only four months ago, the Commission undertook a detailed analysis of international marketplace developments in approving the MCI/WorldCom merger.[168] Its findings demonstrate that cable capacity continues to expand at an awesome rate—and the FCC therefore can expect that increasing pressures will continue to drive down the rates of all international service providers, without having to impose Level 3 direct access on COMSAT.[169]

Satellite competitors: Satellite capacity also continues to experience explosive growth.[170] While there is no question that there is tremendous competition from other satellite

---

167 *See* Brattle Analysis at 41-45.

168 *In the Matter of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.*, CC Docket No. 97-211, FCC 98-225 (released Sept. 14, 1998) ("*MCI/WorldCom Order*").

169 For example, in the Atlantic region, the FCC notes that there are now approximately 20,000 E-1 circuits, with that number scheduled to triple by the end of 1999. *Id.* at ¶ ¶ 86-90. Similarly, cable capacity in the Pacific and Caribbean/Latin American region is also plentiful, with huge increases in capacity planned for the next several years. *Id.* at ¶ 103. As the Commission notes, this figure only includes cables for which a landing license has been granted and a construction contract entered into. Two new projects, TAT-14 and OXYGEN, have announced intentions to construct cables with the equivalent capacity of approximately 500,000 circuits in the next several years. *Id.* at ¶ 106.

170 For example, COMSAT's primary competitor, Hughes/PanAmSat, operates a fleet of 18 satellites, which will increase to 25 satellites by year 2000. In contrast, INTELSAT now has a 19-satellite system, of which the capacity owned by COMSAT for service to and from the United States is the equivalent of about five satellites.

providers on COMSAT's "competitive" routes,[171] such satellite competition is now extending into COMSAT markets still designated as non-competitive.[172] Countries on the FCC's "thin route" list—but which PanAmSat specifically identifies as countries that it now serves—include Oman, the Dominican Republic, Panama, Paraguay, Nigeria, South Africa, Sudan, and Zambia. This further demonstrates that Level 3 direct access is not needed in order to enjoy lower rates and more service options even in these markets.

Other facilities-based satellite competitors: The Commission may also continue to rely on the entry of new competitors, rather than Level 3 direct access with all its attendant risks, to ensure that consumers enjoy competitive (and declining) prices. A significant number of additional satellite systems are due to come on line in the next several years, including up to 13 Ka-band systems authorized by the Commission in May 1997. Also on the way are a number of non-geostationary satellite systems to provide broadband fixed satellite services, including Skybridge (involving Alcatel and Loral) and Teledesic (involving Boeing, Motorola, and

---

171 *Non-Dominance Order*, 13 FCC Rcd 14083.

172 For example, PanAmSat last month expanded its Asia-Pacific coverage with, in the company's own words, "the most powerful trans-Pacific C-band coverage available as well as high-power Ku-band beams serving northeast Asia, southeast Asia and Australia, all with access to the United States." PanAmSat News Release, October 7, 1998; *see also* PanAmSat News Release, November 4, 1998 (also noting that the new satellite provides "the highest power C-band beam ever that stretches from Bangladesh to the western United States").

Microsoft).[173] Even if only a few of the planned systems become operational, they will further increase facilities-based competition.

Teleglobe: A competitive development relevant to direct access and mentioned in the *Notice* has been the emergence of Teleglobe, the Canadian INTELSAT Signatory, as an aggressive player in the U.S. international marketplace. Using its own capacity on INTELSAT and fiber cables, Teleglobe has been authorized by the FCC to provide international facilities-based service in the United States. Thus, COMSAT now faces actual or potential competition from Teleglobe to *every* market COMSAT serves via the INTELSAT system. As the FCC's application files reflect, the Canadian Signatory uses its extensive North American and international fiber optic network to move traffic beyond U.S. borders, and then uses its own INTELSAT capacity to transmit signals to and from the foreign point.[174]

Teleglobe has been particularly aggressive in serving countries in Africa, where most of the thin route countries on the Commission's list are located. In one prominent example, Teleglobe provided *all* of the occasional-use video service for the White House Press Pool to cover President Clinton's visit to sub-Saharan Africa last spring. Teleglobe provided this

---

[173] Teledesic was licensed by the Commission in May 1997.

[174] Teleglobe's FCC tariff lists 218 countries that it serves from the United States. This list includes *62 of the 63 so-called thin route countries* for switched voice service (the one exception being Midway Atoll). Teleglobe's U.S. tariff also includes *139 of the 142* countries considered by the Commission to be non-competitive for occasional-use video. (The three exceptions are Brunei, Midway Atoll, and the Chagos Archipelago.) Furthermore, the Canadian company continues to expand its network's reach through acquisitions. In June 1998, Teleglobe announced that it had merged with the Dallas-based long distance carrier Excel Communications, Inc., creating the fourth largest long distance carrier in the United States.

service from Senegal, Ghana, Uganda, Botswana, and South Africa by leasing 18 MHz of capacity on two INTELSAT satellites and downlinking the signals to its Laurentides, Quebec, teleport. The feed was then sent by fiber links to Teleglobe's New York facilities. COMSAT provided *no* occasional use video services for this trip—which demonstrates that COMSAT faces significant competition even in thin-route markets and that U.S. users already can *and do* obtain INTELSAT service from other providers here in the U.S.

All of these recent developments should put to rest the notion that customers have no choice but COMSAT for facilities-based overseas services, even for the now-outdated list of thin route destinations. The dramatic transformation of the international marketplace in recent years renders direct access unnecessary as a means of ensuring that U.S. customers enjoy market-driven price and service choices. No marketplace facts provide any basis for justifying the implementation of Level 3 direct access.[175]

* * *

In sum, the factors that led the Commission to reject direct access in 1984 are even stronger today, the "developments" cited by the *Notice* since 1984 provide no rational basis for a different conclusion today, and the substantial growth in competition in international

---

[175] It is also important to note that Teleglobe is likely able to offer services at lower rates than COMSAT. Teleglobe's service between the U.S. and third countries is "transit traffic" and is wholly unregulated by Canadian authorities. Transit traffic passes through Canadian facilities but does not originate or terminate within Canada. Canadian policy has sought to promote transit traffic — even though companies like Teleglobe charge Canadian customers higher rates — because it brings Canadian carriers incremental revenue at the expense of foreign carriers, including COMSAT. Because Teleglobe can charge whatever it wants for transit service, it can undercut COMSAT, which cannot discriminate in its provision of U.S. service.

communications militates against direct access still further. On these facts, the Commission cannot rationally reverse its 1984 conclusion that direct access is not in the public interest.

B. The Harms That Would Be Spawned by Level 3 Direct Access Would Greatly Outweigh Any Benefits

In addition to the factors considered by the Commission in 1984, other factors today compel the conclusion that Level 3 direct access would cause much more harm to the public interest than good. As explained in more detail in the attached analysis by The Brattle Group, Level 3 direct access would directly harm the public interest in the United States in several ways not previously considered by the Commission. These harms would include:

- The distortion to competition that would be caused by allowing a tax-exempt INTELSAT to provide services directly in the United States;
- The market distortion that would be caused by pricing direct access at below-cost levels; and
- The delay or skewing of privatization that would be caused by introducing Level 3 access at this particular point in the process of privatizing INTELSAT.

These harms to the public interest would be significant and immediate, without countervailing gains that would be appreciable or enduring. The harms would greatly outweigh the putative benefits of direct access, particularly in light of the scant likelihood that U.S. consumers would ever see a reduction in their prices in a direct access regime.

Indeed, the Commission's proposal would not achieve significant cost savings for any party involved in providing or obtaining international communications services—with the possible exception of former COMSAT customers that might enjoy securing INTELSAT-based capacity at below-cost rates. Nor would the proposal spur greater intermodal or intramodal competition, for by definition there are no new facilities at issue. Worse still, allowing

INTELSAT to access the U.S. market now and compete directly against other U.S. service providers would eliminate one of the best incentives available for moving expeditiously toward privatization—direct access into the U.S. marketplace.

1. The Public Interest Would Not Be Served by Allowing Direct Participation in the U.S. Marketplace by an Intergovernmental Organization That Pays No Taxes and Is Not Subject to FCC Jurisdiction

The *Notice* posits that Level 3 direct access might somehow augment the functioning of the U.S. international marketplace but fails to address the clear irony of the proposal: the agency contemplates permitting a tax-exempt entity—INTELSAT—to vie for customers with U.S. rivals lacking the same advantages.[176] It is not clear from the *Notice* that the Commission appreciates the full significance of this outcome for competition.

Unlike COMSAT, INTELSAT is tax-exempt under U.S. law. INTELSAT's tax advantages include exemption from property taxes, payroll taxes, corporate income taxes, and customs duties; the non-U.S. employees working at INTELSAT's Washington, D.C., headquarters also pay no personal income taxes. The exemptions afford INTELSAT a significant cost savings over otherwise similarly-situated U.S. satellite service providers,[177] which it could pass along to direct access customers in the form of artificially low rates. These

---

[176] *See* generally Brattle Analysis at 7-8. COMSAT, of course, is a U.S. corporation fully subject to federal, state, and local taxes as well as federal antitrust laws and FCC regulations in its common carrier role.

[177] COMSAT, however, *is* subject to taxation, so the current regime of exclusive access eliminates what would otherwise be a competitive advantage for INTELSAT. In other words, COMSAT's provision of INTELSAT services on a taxable basis directly corresponds to PanAmSat's provision of its services on a taxable basis.

lower rates, however, would, however, reflect economic distortions produced by INTELSAT's tax-exempt status rather than genuine economic efficiencies. For example, because of its artificial cost advantage in offering retail services, INTELSAT would likely capture business from other U.S. carriers, including COMSAT, PanAmSat, Loral and others, irrespective of whether INTELSAT is truly the most efficient service provider.

In addition, INTELSAT's tax-exempt status means that permitting it to compete directly in the U.S. market will result in losses to U.S. taxpayers. This loss is obvious with respect to business that INTELSAT would divert from its tax-paying competitors. However, as The Brattle Group explains, U.S. tax revenues also would be lost even if INTELSAT simply expanded its retail business by growing with the overall market (as opposed to taking business from existing providers) because such expanded services would make use of personnel and other assets on a tax-exempt basis at the expense of other sectors of the U.S. economy. In this manner, the Commission's Level 3 direct access proposal could operate as a direct U.S. government subsidy to INTELSAT.[178]

Tax implications aside, INTELSAT's provision of services directly to U.S. customers could distort the operation of the marketplace by virtue of the IGO's total immunity from U.S. antitrust laws and FCC jurisdiction. When COMSAT, as a common carrier, contends for customers in the U.S. market against other providers, it is fully subject to FCC regulation and U.S. competition laws. Nonetheless, in its recent *DISCO-II* decision, the Commission refused to allow COMSAT to serve the U.S. domestic market because of the alleged competitive

---

[178] *See* Brattle Analysis at 8-9.

advantages it receives by virtue of its limited Signatory immunity.[179] It would be truly anomalous (not to mention arbitrary and capricious) if the Commission were now to decide that, despite its much more sweeping immunities, INTELSAT should be allowed to access the U.S. market directly.

For these reasons, Level 3 direct access could distort competition in U.S. international services by allowing INTELSAT to provide services directly.[180] These distortions do not arise under the exclusive access regime established by the Satellite Act, in which INTELSAT services are provided by an entity - COMSAT - that is fully subject to U.S. taxation and competition laws.

2. Because the Commission Misapprehends the Nature of INTELSAT Utilization Charges, Level 3 Direct Access Would Force COMSAT to Subsidize Service for the Large International Carriers at Below-Cost Rates

The Brattle Analysis demonstrates that the IUC mechanism employed by INTELSAT remains one of the most misunderstood elements of international telecommunications policy—even though the Commission itself recognized the truth of the matter in 1984.[181] As explained therein, if Level 3 direct access were introduced in the United States, there would be a

---

[179] *DISCO II Order*, 12 FCC Rcd 24094 (COMSAT petition for review pending in D.C. Circuit). Of course, it is COMSAT's position that its limited immunity does not confer any such competitive advantage.

[180] Other entities, particularly PanAmSat, have argued before the Commission that direct access must be contingent upon a waiver of these immunities by INTELSAT. However, the Commission has no authority to direct INTELSAT to waive them.

[181] Brattle Analysis at 23-26.

considerable risk that the handful of large U.S. carriers — absent an accurately derived surcharge — would obtain access at below-cost prices.[182] This, in turn, would deprive COMSAT of the opportunity to earn a fair return on its statutorily-mandated investment in INTELSAT. The end result would be a Commission-ordered subsidy for the large international carriers at the expense of COMSAT's shareholders.

a) The INTELSAT Utilization Charge is Not a Marginal or "Wholesale" Cost of INTELSAT Capacity

The *Notice's* proposal to allow Level 3 direct access at "the IUC" contains several incorrect assumptions. First, there is no one "IUC" - rather, there are a series of IUCs relating to different INTELSAT capacity configurations. The Commission's use of the term "IUC" can only mean an average based upon some combination of IUC capacity arrangements.

Second, and of fundamental importance to a proper understanding of this issue, IUCs are not the "cost" or "price" of INTELSAT space segment service to Signatories.[183] Thus, the *Notice's* reference to COMSAT's purported "68%" markup of the IUC (implicitly suggesting that this is a profit margin) is extremely misleading. Indeed, the Commission has acknowledged in Congressional testimony that it is incorrect to regard the differences between COMSAT's prices and the IUC as a true markup.

As the Brattle Analysis explains, the IUCs do not include many costs that a commercial private entity would reflect in its charges. In particular, the IUC does not reflect: Signatories'

---

182 Brattle Analysis at 33-38.

183 Brattle Analysis at 23-24.

corporate tax liabilities; any direct costs that Signatories incur in performing their INTELSAT Signatory and service functions; and indirect costs associated with Signatories' investment and operating liabilities.[184] Under the Commission's direct access proposal, COMSAT would still be required to incur a number of significant expenses on behalf of direct access customers.[185] COMSAT also would be required to continue meeting INTELSAT capital calls, debt obligations, and O&M costs at a level proportional to the total U.S. INTELSAT ownership based on utilization created by Level 3 direct access users. Were the Commission to permit direct access at the IUC, therefore, these expenses would continue to be borne by COMSAT, while the large international carriers purchasing INTELSAT space segment directly would be getting a free ride.

b) Pricing Access to INTELSAT at Below-Cost IUCs Would Present a Great Potential for Market Distortions and Harm to COMSAT

The harm of below-cost pricing that would be fostered by the Commission's direct access proposal is significant and real. The Brattle Analysis explains in detail how U.S. carriers could exert strong pressures on foreign Signatories to reduce IUCs to levels that would not allow COMSAT to recover its investment costs in the future even if an adequate surcharge were set today.[186]

---

184 *Id.* at 23-24.

185 These costs would include costs associated with COMSAT's statutorily mandated Signatory functions, as well as the "top off" insurance for satellite asset values that INTELSAT does not insure itself. *Id.* at 35-37.

186 *See id.* at 13-15.

Indeed, the Brattle Analysis demonstrates that COMSAT would be - uniquely among Signatories - vulnerable to below-cost pricing at IUC levels. To most foreign Signatories, actual IUC levels are largely irrelevant because any investment losses from reducing IUCs would be offset by gains associated with "use" of space segment in the provision of retail services. COMSAT, on the other hand, as the largest and only "pure play" investor in INTELSAT (*i.e.*, not itself a retail user of space segment), would be the only Signatory that would stand to be harmed economically from this type of manipulation of the IUCs.[187]

The Brattle Analysis further demonstrates that a considerable risk exists that the powerful coalition of U.S. carriers could convince foreign Signatories to outvote COMSAT and manipulate IUC levels to their own advantage.[188] In addition to allowing the large carriers to obtain artificially low rates at the expense of COMSAT, this type of manipulation would have serious distorting effects on the U.S. market. Traffic would tend to flow to INTELSAT whether or not it achieved any real efficiencies. This impact, combined with INTELSAT's tax exempt status and immunity from antitrust laws, would make it increasingly difficult for other U.S. space segment providers such as COMSAT, PanAmSat and others to compete on a level playing field.

---

187 *Id.*

188 *Id.* at 14-15. The large U.S. carriers have very close links with foreign Signatories as correspondents for completing international calls and as co-owners in international cable systems. This would make it very easy for the U.S. carriers to arrange to compensate these foreign Signatories as they see fit.

c) The "Rate of Return" Under the IUC Mechanism is Not Compensatory to COMSAT

The *Notice* appears to suggest that "the IUC" alone would provide COMSAT with an adequate return on its investment in a Level 3 direct access environment. As demonstrated in the Brattle Analysis, that tentative conclusion is quite incorrect. If Level 3 direct access were implemented under an IUC mechanism, COMSAT would be deprived of a reasonable return on its investment.

The Brattle Analysis shows that the nominal IUC-provided "return" is well below a compensatory return on investment for private, taxable Signatories such as COMSAT.[189] The Brattle Analysis illustrates this conclusion by analyzing the return that COMSAT receives from INTELSAT's IUC mechanism from three different perspectives: (1) return on signatory equity; (2) return on total capital; and (3) return on net plant. Any one of these perspectives clearly shows that an IUC-based mechanism would provide COMSAT with an inadequate return.

Return on Signatory equity, which amounted to approximately 18% under the IUC system in 1997, is the measure most commonly referred to with respect to INTELSAT return rates. However, because this measure only accounts for a pre-tax return on the book value of invested equity, it does not represent what is commonly understood as return on shareholder capital. Indeed, for COMSAT the "18% return" in 1997 translated into a 11.2% post-tax rate of return, significantly lower than the returns of comparable U.S. telecommunications services

---

189 *Id.* at 27-33.

companies.[190] Similar results are produced using either a return on total capital analysis[191] or a return on net plant to INTELSAT Signatories analysis.[192] Under none of these analyses would COMSAT's return on its INTELSAT investment prove adequately compensatory in a Level 3 environment.

The *Notice* suggests that the fact that COMSAT holds "excess" ownership of INTELSAT above its usage level as evidence that the IUC-based return from INTELSAT on that investment must be compensatory. That is an incorrect interpretation, because that is not the reason that COMSAT has excess ownership. In fact, COMSAT holds these additional shares not to maximize its investment return, but in order to enhance its voting power (and the influence of the United States) within INTELSAT—a factor especially critical to U.S. efforts to achieve full privatization.[193] As the Commission is well aware, the difference of a few percentage points in voting power can make a key difference during INTELSAT deliberations.

3. Implementation of Level 3 Direct Access Would Delay or Skew the Privatization of INTELSAT

One factor that was not part of the agency's public interest calculus in 1984 is the impending privatization of INTELSAT. This factor, of course, is one of the most important

---

190 *Id.* at 27-29.

191 This ratio generally is calculated as the total payments to investors divided by the sum of invested equity and debt capital. The use of an IUC mechanism would have afforded COMSAT only a 10.1 percent return under a return on total capital measure in 1997, far lower than returns for mature U.S. telecommunications companies. *Id.* at 29-30.

192 Under this analysis, the IUC mechanism provided only a 9.2 percent return in 1997. This measure of return is closely related to the regulatory concept of "return on rate base." *Id.* at 30-31.

telecommunications policy objectives facing the U.S. government today. The Administration is already on record as stating that "[i]f we can be successful in implementing privatization at INTELSAT, there is little reason to be distracted by introducing new access regimes."[194] Implementation of Level 3 direct access might actually derail the process for a number of reasons.

First, by allowing INTELSAT to serve the U.S. public directly, Level 3 direct access would eliminate the principal leverage that the United States has over the privatization process. Indeed, authorizing Level 3 direct access now would reward INTELSAT—and foreign Signatories—for maintaining the INTELSAT's current intergovernmental structure. Certain Signatories may view it as more beneficial to their own interests to stall the privatization of INTELSAT because there would no longer exist a "carrot" in the form of direct U.S. market access to encourage privatization. If INTELSAT were to gain expanded access to the U.S. market, and especially given its tax exempt status, some foreign Signatories may be more inclined to favor the post-New Skies status quo (with some internal restructuring) than to convert INTELSAT altogether from an intergovernmental organization ("IGO") to a private corporation.

(...Continued)

193 *Id.* at 40-41.

194 Testimony of Jack A. Gleason, National Telecommunications and Information Administration, before the U.S. House of Representatives Subcommittee on Telecommunications (Sept. 30, 1997) (concerning H.R. 1872).

Second, Level 3 direct access would likely create a powerful new constituency in the United States that could delay or skew the optimal privatization outcome: the large U.S. carriers who own the competing transoceanic cable systems and who could access INTELSAT at below-cost rates. In this regard, the *Notice* questions whether such Level 3 direct access customers could affect INTELSAT policies without a formal role in the IGO's governance.[195] But this legalistic focus on form is overly narrow because it ignores the many ways in which these customers could exert considerable influence over INTELSAT's affairs.

For example, while Level 3 would not make these users formal participants in government of INTELSAT, the reality is that the large U.S. carriers would be among INTELSAT's largest customers. No business ignores the desires of its best customers. It is therefore highly likely that the major U.S. carriers will be able to wield significant bargaining power with INTELSAT, and thus directly influence privatization or other restructuring outcomes that might affect the profitability of their competing cable facilities.[196] Such influence is considerably more attenuated today because the Satellite Act requires U.S. users to purchase INTELSAT capacity from COMSAT—a scheme that lawmakers devised specifically to ensure that intermodal competition developed and flourished.

Privatization prospects could suffer for yet another reason: non-compensatory prices to direct access customers could make it too costly for COMSAT to maintain its investment share

---

195 *Notice* ¶ 56.

196 Brattle Analysis at 18-19 (stating that "U.S. direct access customers would hold considerable sway over foreign signatories because... they have close business relationships, share ownership of alternative facilities to INTELSAT, and therefore could share with them the gains from underpaying for COMSAT's past investment").

in INTELSAT. While Level 3 direct access does not automatically trigger a reduction in COMSAT's ownership share, the Brattle Analysis explains that the company might be forced to reduce its ownership because of the significant costs associated with access to the system at a rate below the cost of providing service, with significant financial consequences for COMSAT.[197]

This scenario should bring home to the Commission an appreciation for COMSAT's pivotal role in bringing about efficient privatization. The corporation today is a leader in the IGO reform effort, often against strong opposition from other Signatories and competitors.[198] COMSAT plays this critical role because it owns the largest share, and because it is the only "pure-play" INTELSAT investor. Its interests therefore are intimately aligned with a successfully privatized INTELSAT. By contrast, foreign Signatories' motives are more mixed, given their dual role as owners and retail carriers as well as their large financial interest in competing international transmission facilities. The role of large, non-conflicted investors is widely recognized as critical to monitoring management and to effecting organizational change, and INTELSAT's case is no exception.[199]

If, therefore, COMSAT were to lose its influence in INTELSAT as a result of the implementation of direct access, the prospects for rapid and neutral privatization would suffer.

---

[197] *Id.* at 19-20.

[198] One need only look to the Inmarsat privatization process for a clear indication of the way in which COMSAT has taken the lead in IGO reform.

[199] Brattle Analysis at 20 (citing Andrei Shleifer and Robert W. Vishny, "Large Shareholders and Corporate Control," *Journal of Political Economy*, 1986, vol. 94, No. 3,. 461-88.

Indeed, under this scenario, COMSAT could be reduced from a leader in the INTELSAT reform effort to a weakened bystander. Thus, Commission action that would decrease COMSAT's real-world influence, whether or not accompanied by a decrease in ownership share, would open the door for those who oppose INTELSAT privatization to thwart U.S. government goals for the IGO. This would be a concrete harm to the public interest.

4. Any Potential Benefit of Direct Access to End Users Would be *de Minimis*

Even if the Commission's proposal for Level 3 direct access somehow could avoid creating the harms identified above, the benefits that direct access might bring to end users would be minimal at best. Of course, since the harms identified above would surely occur, they would greatly outweigh the comparatively insignificant – even undetectable – "benefits" that, under the theory advanced in the *Notice*, would follow from Level 3 direct access.

As the FCC first acknowledged in 1984, the cost of COMSAT-provided space segment accounts for only a small fraction of what U.S. end users pay for international carrier services.[200] Moreover, whatever cost reductions would accrue to U.S. carriers as a result of the implementation of direct access, it is unlikely that even these savings would be fully passed on to end users.

As explained in the Brattle Analysis, it is unlikely that end-users will reap all the benefits of whatever savings carriers may gain as a result of the implementation of direct

---

[200] *1984 Order* at ¶ 67. The Commission stated then that, even if passed through to end users, savings would represent only a few percentage points of the total end-user charge. The Brattle Group estimates that today such savings would amount to only 1.3 percent of total end user charges, even if INTELSAT services were provided *free*.

access for two reasons: (1) it is probable that foreign carriers would appropriate part of these savings; and (2) it is *im*probable that U.S. retail carriers would pass their share of savings on to customers.[201] Foreign monopolists could take advantage of any reduced charge for U.S. half-circuits by increasing their own prices. Indeed, this is a well-known risk associated with one-sided liberalizations in the international telecommunications industry.[202] And while the Commission's *Notice* specifically advocates direct access on thin routes, savings to end users are especially vulnerable to appropriation by foreign carriers with respect to such non-competitive markets. Consequently, even substantial reductions in COMSAT's U.S. half-circuit rates would have little impact on total end user prices for service to and from these markets.

Moreover, the FCC is more than aware that cost savings for wholesale "inputs" into the provision of retail services do not necessarily translate into cost savings for end users. Recent history indicates that any savings that the major carriers might enjoy would likely stay with them.[203] In February 1998, Chairman Kennard noted that a "growing body of evidence ... suggests that the nation's largest long distance companies are raising rates when their costs of

---

201 Brattle Analysis at 57-59.

202 *Id.* at 58 (citing Evan Kwerel, *Promoting Competition Piecemeal in International Telecommunications*, OPP Working Paper 13, Office of Planning & Policy, FCC, December 1984).

203 Brattle Analysis at 58-59. For example, a June 1997 Commission analysis found that carriers' international service rates have been decreasing more slowly than the carriers' cost of international service, with the result that "carriers today realize much greater profits in providing international service than they did a decade earlier." *Trends in the U.S. International Telecommunications Industry*, at 62 Jim Lande and Linda Blake, Industry Analysis Division, Commons Carrier Bureau, FCC, (June 1997).

providing service are decreasing."[204] The United States Telephone Association recently released the results of two major studies finding "'incontrovertible' evidence supporting the ... charge that the three major interexchange carriers (IXCs) are not flowing through their interstate access charge reduction to residential customers."[205] These developments comport with COMSAT's own experience; while its rates to AT&T, MCI, and Sprint have declined since 1992, the basic rates that those carriers charge for international calls have risen in the same period.

The facts before the Commission in this and related proceedings prove that COMSAT has been substantially lowering rates to its major carrier customers (and other users) without the so-called "incentive" of Level 3 direct access. Those rates represent only a pittance of the average basic rate that the retail carriers charge their end-user subscribers—and it is not at all clear that the carriers have passed through the price breaks they already have enjoyed to subscribers. These facts provide the Commission no basis to find that end users would benefit from the implementation of Level 3 direct access now.

---

[204] Brattle Analysis at 59 (citing Letter from Chairman William Kennard to Michael C. Armstrong, Chairman & CEO of AT&T, February 26, 1998).

[205] *Id.* (citing "USTA Studies Say IXCs Pocket Access Charge Cuts," *TeleCompetition Report,* October 29, 1998, at 14). COMSAT also speaks from its own experience. As COMSAT discussed in its recent Thin Route Reply Comments, COMSAT has continually lowered its space segment rates to AT&T since 1992. Yet AT&T has continually *increased* its rates for basic Dial 1 outbound services. Thin Route Reply Comments at 6, n.11.

5. Given the Pending Privatization of INTELSAT, Any Potential Benefits of Direct Access Would Be of Short Duration and Not Worth the Significant Costs

The privatization of INTELSAT, which has gained significant momentum in the last year, likely will supersede any action that the Commission could take to allow for Level 3 direct access in the United States. Privatization will eliminate exclusive Signatory access to INTELSAT; indeed, it will eliminate the role of Signatory altogether. Thus, privatization will accomplish the goals of direct access (and bring about substantial efficiency gains) while avoiding the major harms that would occur if direct access is imposed while INTELSAT is still an intergovernmental organization.

As the Commission knows, the first phase of INTELSAT privatization recently was completed with the spin-off of five INTELSAT satellites (and another currently under construction) into a new, fully private global satellite company, New Skies Satellites N.V., incorporated in the Netherlands.[206] Therefore, because COMSAT has no exclusive right to sell New Skies space segment to U.S. customers, direct access effectively has arrived already for approximately 25% of the prior INTELSAT satellite fleet.

When the INTELSAT Assembly of Parties approved New Skies, it also made clear that it was just the first step in the restructuring process. The next phase is progressing under the guidance of INTELSAT's new Director General, Conny Kullman, who assumed his position in

---

[206] New Skies is expected to place its greatest emphasis on video services; thus, customers now have yet another choice for this type of service.

October 1998 after running on a platform strongly supportive of full privatization. Director General Kullman has announced a target date of March 2001 for the process to be concluded.[207]

Given the normal time it takes to complete complex FCC rulemaking proceedings, it is reasonable to assume that a decision to implement Level 3 direct access and adopt a reasonable surcharge could not occur in less than 9-12 months. Thus, even if Level 3 access might produce some benefits, and assuming that such benefits actually flowed through to end users, this whole new FCC regulatory program would be in effect only for a very short time unless, as discussed above, such direct access causes the privatization process to founder. This would be a prodigious regulatory effort for a program that even direct access proponents concede has far fewer benefits than full privatization. Limited Commission resources could therefore be more wisely expended by prioritizing the achievement of INTELSAT privatization than by pursuing direct access as a fix (and a temporary one at that) to the exclusive-Signatory structure that will soon disappear.

C. Direct Access in Other Countries Occurs in Factually Inapposite Settings and Therefore Is Not Relevant to the Competitive U.S. Marketplace

The *Notice* cites the existence of some form of direct access in other nations as a justification for implementing Level 3 direct access here.[208] In fact, direct access abroad rarely operates in the fully nondiscriminatory fashion that the *Notice* envisions. Moreover, direct

---

207 Telecomm Reports, Nov. 16, 1998, p. 14.

208 *Notice* ¶ 23.

access has never been implemented in a nation in which the Signatory was specifically created solely to invest in INTELSAT, and whose main profit-making function was to offer INTELSAT's capacity to all domestic users on a nondiscriminatory basis. To the contrary, with the exception of COMSAT, INTELSAT's signatories are virtually all vertically-integrated national carriers.

Put succinctly, direct access abroad has been implemented in recent years to foster facilities-based competition to a Signatory which also operates the local and/or long-distance telephone system within the given country. In other words, direct access abroad today serves the same purpose for which Congress specifically, and successfully, designed COMSAT thirty-six years ago!

As the Commission is aware, until relatively recently most foreign countries chose to participate in INTELSAT through a combination of the postal, telephone and telegraph authority ("PTT") and the dominant national carrier, which itself was intertwined with the PTT. This practice restricted access to the INTELSAT system in foreign countries and artificially constrained marketplace forces.[209] While recently a number of these countries have been moving towards increased competition, these efforts have shown mixed success.[210] Level 3 or Level 4 direct access in these settings functions as an overlay, to one degree or another,

---

[209] The national experience in other countries is also a product of historical forces. For example, in the past, PTTs in Africa had to rely on a communications infrastructure that was established by the European nations that colonized them. Thus, at one time, a call to Mali from Senegal might have had to go through France.

[210] For example, while Chile enjoys one of the most liberalized telecommunications markets in the world, Chile does not afford resale opportunities equivalent to those available under U.S. law. *See Americatel Corp.*, DA 98-1589 (rel. Aug. 7, 1998).

on top of a market system dominated either by the government or by one or two well-entrenched carriers that dwarf their direct access competitors.[211]

To determine how such experience might possibly be relevant to the U.S. setting, COMSAT examined the 93 countries that the *Notice* identifies as allowing some noteworthy form of direct access. As an initial matter, 19 of these 93 countries are non-member users—which INTELSAT treats as equivalent to direct access status, even though many in fact have only one national point of access (and, of course, no Signatory).

Of the remaining 74 Signatory nations that actually permit direct access in some form, 69 permit such access only on a case-by-case basis, not as a blanket policy (*i.e.*, the approach being taken in the *Notice)*. This means that they may afford access to one non-Signatory entity but not to others, or they may permit access on differing terms and conditions. Thus, categorizing these nations as affording Level 3 or Level 4 direct access may not, in fact, reflect reality for any particular user in that country.[212] The access determination is made by the Signatory. This does not appear to be the regime envisioned in the *Notice*, and it certainly

---

[211] Looking again at Chile, we note that the Signatory, ENTEL-Chile, is a domestic and long distance carrier in Chile, and as recently as 1992, ENTEL-Chile provided nearly 100% of Chile's international telephone service. *Bell Atlantic Communications, Inc.* 12 FCC Rcd 1880, 1888, n. 38 (1997).

[212] For example, of the 57 Signatory countries listed in Appendix A to the *Notice* as permitting Level 3 direct access, seven allow only the Regional African Satellite Communication Organization ("RASCOM") as a direct access user. RASCOM, an association of more than 40 African countries, is a unique entity that has a special arrangement with INTELSAT for the use of one of INTELSAT's satellites for intra-African telecommunications. Of the remaining 50 countries, 22 permit direct access for one or *no* entities other than RASCOM. In several cases, the one other entity is the broadcasting arm of the government. For example, in Spain, the direct access user is Retevision, and in Namibia it is the Namibian Broadcasting Corporation.

conflicts with the U.S. goals for privatizing INTELSAT and thereby eliminating the Signatory role.

Current facts indicate that *only four* countries provide blanket direct access permitting the same level of access to each company in its country or territory, *i.e.*, direct access on a nondiscriminatory basis. The development of competition in those nations—Austria, France, the United Kingdom, and Finland (the latter of which is not listed in the *Notice*)—is completely distinct from that of the United States. Unlike the U.S., each of these four countries permits end-user service provision to be vertically integrated with INTELSAT space segment ownership. The Signatory in each case continues to serve as a principal, if not the dominant, provider of local and/or long-distance telephone service:

- The 1997 market shares of Finland's Signatory, Sonera Ltd. (formerly Telecom Finland), for various service markets ranged from about 32% of the local exchange market to almost 75% of the mobile communications market, with long distance and international market shares falling between the two extremes.[213]

- The French Signatory, France Telecom, has faced full competition in the provision of telecommunications services only since the beginning of 1998, and it remains one of the world's leading providers of telecommunications services, with 33.7 million telephone lines in service and operations in over 50 countries.[214]

---

[213] Sonera had a 41.6 percent share of the long distance market and a 65.9 percent share of the international telecommunications market in Finland in 1997. Espicom Business Intelligence, Communications Companies Analysis 1998. The ownership of the Finnish government in Sonera Group, Plc, the parent company of Sonera Ltd. is 77.8 percent. Sonera Group Plc, Press Release, Nov. 11, 1998 (http://www.sonera.com).

[214] France Telecom home page, http//www.francetelecom.com.

- Post & Telekom Austria ("PTA") has been a stock corporation only since May 1996; its telecommunications division had a 98% share of its market in 1997.[215]

- The INTELSAT Signatory in the United Kingdom, British Telecommunications ("BT"), is a multi-billion dollar dominant facilities-based carrier. Originally an arm of the government's post office, BT underwent the first phase of its privatization in the mid-1980s but retained a duopoly position in the provision of international communications until 1996. BT continues to enjoy a dominant position in Britain; as of September 1997, it maintained a 87% share of the local exchange market, a 77% share of the long distance market, and a 52% share of the market for outgoing international calls.[216]

COMSAT's interest in providing INTELSAT access is much different than the interest of these carriers for two reasons. First, unlike COMSAT, these four Signatories earn substantial revenue through the provision of end-user telecommunications services. None depends on the wholesale provision of INTELSAT access to other carriers as its primary source of income; their vertical integration ensures that, despite the implementation of direct access within their domestic markets, these Signatories have reason and opportunity to make significant use of INTELSAT capacity to fulfill their own "downstream" traffic requirements.

Second, each of these countries has a relatively small investment stake in INTELSAT. COMSAT's ownership stake in INTELSAT is 18%. In stark contrast, BT as INTELSAT's next largest investor has only a 5.7% interest.

Third, these Signatories' position as leading retail-level telecommunications service providers casts exclusive access to INTELSAT capacity in a different light. For foreign

---

215 PTA home page, http://www.pta.at/en/ag/index.html

216 BT Annual Report and Accounts 1998.

policymakers seeking to introduce facilities-based competition and move toward free-market systems in their telecommunications sectors, direct access is one answer. But direct access overseas represents a solution to a problem that has never existed in the United States: the existence of a PTT/dominant carrier bottleneck for accessing INTELSAT capacity. As shown above and in the attached statutory analysis, Congress created COMSAT as an independent supplier of INTELSAT space segment precisely to avoid putting control of the first satellite system into the hands of a vertically-integrated entity primarily interested in protecting its market position. Instead, U.S. lawmakers guaranteed access to the system for all users by requiring COMSAT to offer its capacity on a non-discriminatory basis, and the corporation continues to successfully fulfill that obligation.[217]

V. IF LEVEL 3 DIRECT ACCESS WERE IMPLEMENTED, A SUBSTANTIAL SURCHARGE WOULD BE NECESSARY TO ENSURE THAT COMSAT IS COMPENSATED AS REQUIRED BY LAW

If Level 3 direct access were implemented, "a surcharge for direct access over and above the IUCs would be necessary to give COMSAT a fair chance to recover all direct-access

---

[217] The Commission also correctly notes that COMSAT subsidiaries in Argentina and Britain are permitted direct access to INTELSAT. *Notice* ¶ 10. Unlike other countries in which the Signatory is a telecommunications service provider, the Signatory in Argentina is the Comision Nacional de Telecommunicaciones, Argentina's telecommunications regulatory authority. Because the Signatory is not a service provider, there is no other way in Argentina to obtain space segment capacity to INTELSAT except through direct access.

In the United Kingdom, INTELSAT has been given blanket authorization to allow all entities operating under a license in the U.K. direct access to INTELSAT. COMSAT's access is routine procedure in Britain, where direct access has been permitted since 1994. As noted in the text, the factual setting in which the United Kingdom's direct access policy developed does not exist in the United States.

related costs, including investment costs."[218] If such a surcharge were not adopted, the U.S. government would be liable for damages to COMSAT.[219] The mere act of setting that surcharge, however, would be a complex endeavor that would itself undermine the alleged benefits of direct access. Moreover, the surcharges would need to be revisited periodically to ensure their continued reasonableness. This would require the type of complex rate regulation that the Commission recently determined was unnecessary in the *Non-Dominance Order*. Given that this regime would remain in place only until privatization, implementing Level 3 direct access—with all of its attendant regulatory procedures—would be an unwise as well as unwarranted allocation of agency resources.

COMSAT has *not* attempted to replicate the complicated analysis that would be legally required in order to ensure that a direct access surcharge regime was fully compensatory. However, based on some initial calculations, COMSAT has determined that the appropriate surcharge could range, on average, from a low of 28.67% (based on outdated rate-of-return regulatory policies) to as much as 45.88% (based on a comparison to price cap carriers) of the applicable IUC. The results of COMSAT's analysis are set forth below and in the attachment to these comments prepared by COMSAT's Director of Financial Planning and Analysis.

That attachment shows that, if Level 3 direct access had been in effect in 1997, a surcharge of about 18.2% of INTELSAT's operating revenues would have been necessary

---

[218] Brattle Analysis at 35.

[219] Of course, for the reasons discussed above, the FCC lacks the authority to mandate direct access at all. The point is that, even if the FCC had such authority - and indeed even if Congress were to amend the Satellite Act to permit direct access - the Constitution would require full compensation for COMSAT.

merely to bring COMSAT's return on its INTELSAT investment to the 12.48% after-tax level then allowed by the Commission under rate-base, rate of return regulation. Moreover, a second surcharge of approximately 10.4% would have been necessary to cover COMSAT's estimated costs attributable to performing its statutorily-required functions as U.S. Signatory.

Because COMSAT is no longer subject to rate-base, rate of return regulation for the vast majority of its traffic, COMSAT is no longer restricted to a 12.48% after-tax return. Accordingly, the attachment also shows what a compensatory surcharge could be, using, as a proxy for COMSAT's actual competitive return, the weighted average return for price-cap regulated carriers. This analysis demonstrates that the appropriate average surcharge could in fact be in the neighborhood of 46% of the applicable IUC. However, perhaps still another more appropriate comparison would be to non-rate-regulated carriers, since price-cap carriers (unlike COMSAT) are dominant. In any event, it would not be appropriate to rely on such proxies as a substitute for full-blown analyses of COMSAT's actual damages in 1999 and all subsequent years under a direct access regime.

As a matter of takings jurisprudence, it is clear that COMSAT must be able to recover the full costs of its activity. This would include direct expenditures, the time cost of money expended for capital investment, and any opportunity costs—*i.e.*, the net benefit forgone from the best alternative activity. Thus, in pressing a takings claim or a claim for breach of contract, COMSAT's measure of damages would be for its lost expectation. That expectation consisted of the reasonable opportunity to earn recovery of its investment in INTELSAT. It also includes a competitive, risk-adjusted return on that capital, less any costs that COMSAT would avoid by virtue of no longer making retail sales of space segment on the INTELSAT system.

Courts have recognized that opportunity cost is the proper economic definition of cost. "[A]gencies that regulate utility rates have recognized 'opportunity costs' as a factor to be considered in setting rates designed to cover the actual costs incurred to provide a particular service."[220] Acting on that view, the D.C. Circuit rejected "the view that an opportunity cost is not an 'actual cost,' in law or economics, because it does not appear as a cash expenditure in the account books of the [regulated firm]."[221] In fact, the FCC has also embraced the idea that a price for mandatory access to a facility should include opportunity cost.[222] Thus, if the Commission were to mandate Level 3 direct access without establishing an adequate surcharge, COMSAT would have a valid claim against the United States for reimbursement of both its historic and opportunity costs.

---

220 *City of Los Angeles*, 103 F.3d 1027, 1032 (D.C. Cir. 1997).

221 *City of Los Angeles, Dep't of Airports v. U.S. Dep't of Transportation*, 103 F.3d 1027, 1032 (D.C. Cir. 1997) (citing *Pennsylvania Electric Co.*, 60 F.E.R.C.¶ 61, 034, 61, 120 & n. 1 (1992), aff'd sub nom. *Pennsylvania Elec. Co. v. FERC*, 11 F.3d 207 (D.C. Cir. 1993); William Baumol & J. Gregory Sidak, *Transmission Pricing and Stranded Costs in the Electric Power Industry* 139 et seq. (AEI Press 1995)).

222 *See, e.g., Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation Leased Commercial Access*, 11 F.C.C. Rcd. 16,958-59 (1996) ("We generally agree with Time Warner that the value of leased access channels 'is the opportunity cost imposed on the operator from the lost chance to program these channels.'") (quoting Time Warner Comments); *see also Implementation of Section 302 of the Telecommunications Act of 1996; Open Video Systems*, 11 F.C.C. Rcd. 18,223 (1996).

VI. CONCLUSION

For the foregoing reasons, COMSAT Corporation respectfully urges the Commission to reject, once again, implementation of Level 3 direct access to INTELSAT in the United States.

Respecfully submitted,

COMSAT Corporation

By: Warren Y. Zeger (Rest)
Warren Y. Zeger
Howard D. Polsky
Keith H. Fagan
Bruce A. Henoch

COMSAT CORPORATION
6560 Rock Spring Drive
Bethesda, Maryland 20817
(301) 214-3000

Richard E. Wiley
Lawrence W. Secrest, III
William B. Baker
Rosemary C. Harold

WILEY, REIN & FIELDING
1776 K Street, N.W.
Washington, D.C. 20006
(202)429-7000

ATTACHMENT 1

AFFIDAVIT OF THEODORE W. BOLL

I am Director, Financial Planning & Analysis, for COMSAT Satellite Service, a division of COMSAT Corporation. I have been employed by COMSAT since 1982 and have been the director responsible for rate and tariff matters involving COMSAT's INTELSAT business since 1987.

I have been asked by COMSAT management and by The Brattle Group to estimate the surcharge that would be necessary: (1) to make up the shortfall that would result if COMSAT's return on its investments in INTELSAT space segment were limited to the return provided through the INTELSAT Utilization Charge (IUC) mechanism, and (2) to allow recovery of the expenses that COMSAT, as the investing U.S. Signatory, would continue to incur under Level 3 direct access. Based upon the calculations shown in Exhibits 1-4, I conclude that the total of these two surcharges could range from 28.67 percent to 45.88 percent.

Based upon my understanding of the methodology that the FCC employs for price-cap and non-price-cap companies, I conclude the following. If Level 3 direct access had been in effect in 1997, a surcharge of 18.2 percent on INTELSAT's operating

revenue would have been necessary to bring COMSAT's return on its INTELSAT investment to the 12.48 percent after-tax level then allowed by the Commission under rate-base, rate-of-return regulation. This surcharge calculation is shown in Exhibit 1.

However, because COMSAT is no longer subject to rate-base, rate-of-return regulation for the vast majority of its INTELSAT traffic, I also compared the return provided through the IUC mechanism to the returns of two groups of U.S. carriers, i.e., companies subject to price-cap regulation and companies not subject to price-cap regulation. The results of that comparison are shown in Exhibit 2. I then calculated the surcharge that would have been necessary to make COMSAT's 1997 return on its INTELSAT investment equal to the weighted average return of price-cap companies as reported by the FCC. Those calculations, which are set forth in Exhibit 3, demonstrate that a surcharge of 35.4 percent might be necessary in order for COMSAT to be fairly compensated for its INTELSAT investment.

Finally, I calculated the additional surcharge that would have been necessary in 1998 to cover COMSAT's estimated costs attributable to performing as the statutorily-designated investing U.S. Signatory under Level 3 direct access. As shown

in Exhibit 4, I conclude that such an additional amount would be at least 10.4 percent on COMSAT's projected 1998 IUC payments.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Theodore W. Boll 12/21/98

Theodore W. Boll

Derrick Johnson

Derrick Johnson
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires December 15, 1999

Estimated Total Surcharge

($000)

1997 INTELSAT Rate of Return - as calculated from Annual Report	9.14%
COMSAT Allowed Rate of Return before Non-Dominance	12.48%
Increase Required for INTELSAT to Match Avg. Price Capped	3.34%
INTELSAT Avg Comm Plant and Equipment (1997)	3,195,420
Increase in Rate of Return Required	3.34%
Increase in Operating Revenue Required to Obtain Avg. Return	106,883
Increase in Revenue Required to Obtain Avg. Return	106,883
Current COMSAT Tax Rate	39.00%
Required Pre Tax Increase in Revenue to Obtain Avg. After Tax Return	175,219
1997 INTELSAT Telecommunication Revenue	961,619
Increase in Operating Revenue Required to Obtain Avg. Return	175,219
Total Revenue Required	1,136,838
Surcharge Required for Additional Revenue	18.22%
Surcharge for Signatory Functions	10.44%
Total Surcharge	28.67%

Rate of Return Calculation for INTELSAT

($000)

		1997 *	Revenue Increase	1997 after Adj.
Telecommunications Revenue		$ 961,619	$ 175,219	$ 1,136,838
Operating Expenses				
Operations and Development		131,989		131,989
General and Administrative		26,658		26,658
Depreciation		373,316		373,316
Total Operating Expense		$ 531,963		$ 531,963
Operating Income		429,656	175,219	604,875
Tax Expense (see Tax Calculation below)		137,751		206,086
Operating Income After Tax		$ 291,905		$ 398,788
Comm. Plant and Other Property	1997	$ 3,276,045		
	1996	$ 3,114,794		
Avg. Comm. Plant and Other Property		$ 3,195,420		$ 3,195,420
After Tax Rate of Return on Communications Plant and Other Property		9.14%		12.48%

Tax Calculation

	1997 *	Adj.	Adj. 1997
Telecommunications Revenue	$ 961,619	$ 175,219	$ 1,136,838
Total Operating Expense	531,963		531,963
Operating Income	429,656		604,875
Interest Expense	(76,448)		(76,448)
Pre-Tax Income	353,208		528,427
Tax Rate	39%	39%	39%
Tax Expense (Pre-Tax Income times Tax Rate)	$ 137,751	$ 68,335	$ 206,086

* Data are from the 1997 INTELSAT Annual Report

INTELSAT Rate of Return Comparison to Price Cap Companies

	REPORTING ENTITY	1997	1996	1995	1994	1993
1	GTE SOUTHWEST INC. (CONTEL NEW MEXICO)	48.86 %	42.53 %	47.29 %	27.57 %	%
2	CENTRAL TELEPHONE OF TEXAS	43.40	21.58	21.81	18.39	16.19
3	GTE NORTH INC. (ILLINOIS CONTEL)	40.63	36.34	24.21	26.48	
4	GTE NORTH INC. (COPA + COQS)	36.92	40.55	36.38	32.60	22.33
5	GTE SOUTH INC. (VIRGINIA ONLY - COVA)	33.80	30.90	23.18	23.45	
6	CONTEL OF MINNESOTA - COMN	33.54	32.38	23.81	22.12	
7	GTE MIDWEST INC. (CONTEL IOWA COIA + COSI)	33.49	30.39	22.39	18.31	
8	FRONTIER TIER 2 CONCURRING COMPANIES	31.93	26.91	19.32	17.69	16.42
9	GTE NORTHWEST INC. (CONTEL WASHINGTON ONLY - C	31.71	29.43	22.24	18.07	
10	GTE CALIFORNIA, INC. (NEVADA CONTEL)	30.98	25.50	19.15	27.39	
11	GTE NORTHWEST INC. (IDAHO ONLY - GTID)	30.91	23.94	20.78	19.60	
12	UNITED TELEPHONE CO. OF THE NORTHWEST	30.59	34.55	34.17	29.32	19.39
13	GTE ALASKA, INC. (ALASKA GTE)	29.58	19.44	22.48	24.78	16.13
14	GTE NORTH INC. (INDIANA CONTEL)	29.21	29.02	23.27	22.44	
15	GTE NORTHWEST INC. (OREGON ONLY - GTOR)	28.29	23.50	18.89	16.20	
16	FRONTIER COMMUNICATIONS OF MINNESOTA & IOWA	28.26	23.71	21.90	19.65	14.99
17	GTE MIDWEST INC. (NEBRASKA GTE)	27.12	28.86	21.67	20.35	13.84
18	UNITED TELEPHONE CO. OF INDIANA, INC.	26.13	24.30	20.33	18.41	15.55
19	GTE NORTH INC. (OHIO GTE)	25.41	21.20	17.21	16.90	12.66
20	GTE NORTH INC. (PENNSYLVANIA GTE)	25.24	18.91	14.02	14.81	11.72
21	GTE SOUTH INC. (S. CAROLINA ONLY - COSC)	24.97	17.40	12.32	9.77	
22	GTE MIDWEST INC. (IOWA ONLY - GTIA)	24.56	22.68	16.49	19.05	
23	GTE SOUTH INC. (NORTH CAROLINA ONLY - GTNC)	24.56	23.83	14.99	19.02	
24	GTE NORTHWEST INC. (WASHINGTON ONLY - GTWA)	24.43	21.60	15.87	13.67	
25	GTE INDIANA + ALLTEL INDIANA (GTIN + GLIN)	24.25	26.23	18.80	18.21	14.50
26	GTE SOUTHWEST INC. (NEW MEXICO ONLY - GTNM)	24.24	24.60	17.18	10.00	
27	GTE SOUTH INC. (SOUTH CAROLINA ONLY - GTSC)	24.06	25.70	18.93	17.60	
28	GTE SOUTH INC. (ALABAMA ONLY - GTAL)	23.54	17.68	11.39	11.83	
29	GTE ILLINOIS + ALLTEL ILLINOIS (GTIL + GLIL)	22.83	18.36	14.69	17.12	13.77
30	GTE SOUTH INC. (KENTUCKY ONLY - GTKY)	21.29	18.46	13.89	10.96	
31	MICRONESIAN TELECOMMUNICATIONS CORP.	20.06	15.49	7.49	2.53	
32	SPRINT LOCAL TELEPHONE COMPANIES - FLORIDA	20.05				
33	CINCINNATI BELL TELEPHONE COMPANY	20.04				
34	NEVADA BELL	19.46	17.75	17.31	17.92	17.44
35	GTE FLORIDA INC. (FLORIDA GTE)	19.19	15.17	8.56	7.36	7.36
36	GTE CALIFORNIA, INC. (CALIFORNIA CONTEL)	19.09	17.63	16.03	12.19	
37	CENTRAL TELEPHONE OF ILLINOIS	18.92	18.40	19.55	18.87	10.18
38	UNITED TELEPHONE - SOUTHEAST (TN, VA & SC)	18.89	20.66	19.05	19.17	13.39
39	GTE SOUTHWEST INC. (OKLAHOMA ONLY - GTOK)	18.46	10.77	6.70	6.44	
40	GTE NORTH INC. (WISCONSIN GTE)	18.36	17.99	13.96	13.65	13.85
41	GTE SOUTHWEST INC. (TEXAS CONTEL)	18.27	22.42	14.62	8.29	17.89
42	AMERITECH OPERATING COMPANIES	18.22	18.27	16.78	13.39	14.80
43	BELLSOUTH TELEPHONE COMPANIES	17.90	16.40	15.78	15.92	13.68
44	GTE CALIFORNIA INC. (CALIFORNIA GTE)	17.87	13.72	6.95	9.08	7.05
45	GTE ARKANSAS, INC. (COAR + COSA)	17.48	19.13	18.24	17.44	
46	UNITED TELEPHONE - EASTERN (NJ & PA)	17.36	17.42	14.87	16.12	13.98
47	CENTRAL TELEPHONE OF NEVADA	17.07	20.42	20.46	18.90	14.23
48	GTE MICHIGAN + ALLTEL MICHIGAN (GTMI + GLMI)	16.80	14.85	11.45	11.10	9.82
49	GTE MIDWEST INC. (MISSOURI GTE)	16.63	19.84	17.18	18.20	13.48
50	CENTRAL TELEPHONE OF NORTH CAROLINA	16.55	15.75	15.36	14.19	11.97
51	CAROLINA TELEPHONE AND TELEGRAPH COMPANY	16.53	15.38	17.77	15.39	11.10
52	GTE SOUTH INC. (N. CAROLINA ONLY - CONC)	16.44	11.98	14.16	10.75	
53	GTE SOUTH INC. (VIRGINIA ONLY - GTVA)	16.04	11.07	10.91	9.29	
54	CENTRAL TELEPHONE OF VIRGINIA	16.01	17.46	15.87	14.30	15.55
55	UNITED TELEPHONE-MIDWEST (MO,KS,MN,NE,WY,TX)	15.50	21.52	19.64	17.44	13.92
56	U.S. WEST COMMUNICATIONS, INC.	15.39	13.64	12.00	12.40	13.62

INTELSAT Rate of Return Comparison to Price Cap Companies

(page 2)

	REPORTING ENTITY	1997	1996	1995	1994	1993
57	GTE SYSTEMS OF THE SOUTH (COAL ONLY)	15.23 %	9.69 %	11.88 %	12.58 %	%
58	GTE SOUTHWEST INC. (TEXAS ONLY - GTTX)	15.04	11.53	7.11	7.24	
59	BELL ATLANTIC	14.77	11.24	13.74	14.00	14.01
60	GTE CALIFORNIA, INC. (ARIZONA CONTEL)	14.10	4.15	2.95	6.24	
61	BELL ATLANTIC (NYNEX)	13.73	15.23	12.12	11.79	12.55
62	CITIZENS TELECOMMUNICATIONS COS. (TARIFF 2)	13.19	13.58			
63	FRONTIER TELEPHONE OF ROCHESTER, INC.	13.19	10.20	11.87	12.02	11.63
64	UNITED TELEPHONE CO. OF OHIO	13.17	16.12	15.93	16.54	13.15
65	SOUTHERN NEW ENGLAND TELEPHONE COMPANY	12.70	11.64	11.58	11.34	11.52
66	ALIANT COMMUNICATIONS COMPANY	12.27	14.95	16.09	15.47	14.95
67	GTE MIDWEST INC. (CONTEL MISSOURI COMO + COCM +	11.92	11.97	9.57	10.79	
68	PACIFIC BELL	11.90	17.68	15.76	14.93	12.89
69	GTE HAWAIIAN TELEPHONE CO. INC. (HAWAII GTE)	10.68	9.42	7.87	8.15	9.18
70	SOUTHWESTERN BELL TELEPHONE COMPANY	10.32	11.63	13.38	13.01	12.91
71	CITIZENS TELECOMMUNICATIONS COS. (TARIFF 1)	10.31	15.42			
72	**INTELSAT**	**9.14**	**9.28**	**8.11**	**7.21**	**8.44**
73	GTE SOUTH INC. (KENTUCKY ONLY - COKY)	6.94	4.49	4.79	5.56	
74	CONTEL OF MINNESOTA - GTMN	6.03	(13.13)	(10.88)	(0.04)	
75	GTE SOUTHWEST INC. (ARKANSAS ONLY - GTAR)	3.55	(1.97)	(1.57)	0.65	
76	WEST COAST TELEPHONE CO. OF CALIFORNIA - GNCA	(28.51)	(24.03)	(16.99)	(15.37)	

INTELSAT Rate of Return calculated from Annual Reports. Equals Operating Income after tax divided by Average Plant and Other Property

Price Cap companies Interestate Rate of Return is from 'Rate of Return Report' as of May 1, 1998. Companies without 1997 rate of returns were eliminated.

Rank comparison is based on 1997 rate of returns.

INTELSAT Rate of Return Comparison to Non Price Cap Companies

	NAME OF COMPANY	1997
1	FORT MILL TELEPHONE COMPANY	37.20 %
2	ALLTEL CAROLINA, INC.	30.33
3	ALLTEL KENTUCKY	27.64
4	HOME TELEPHONE COMPANY	25.86
5	LUFKIN-CONROE TELEPHONE EXCHANGE	24.74
6	CONCORD TELEPHONE CO.	22.99
7	CENTURY TELEPHONE OF OHIO, INC.	22.69
8	CENTURY TELEPHONE OF WISCONSIN, INC.	22.02
9	ALLTEL SOUTH CAROLINA, INC.	21.59
10	TEXAS ALLTEL	21.39
11	ALLTEL ALABAMA, INC.	21.14
12	ALLTEL NEW YORK, INC.	20.49
13	ALLTEL MISSISSIPPI, INC.	19.16
14	ALLTEL PENNSYLVANIA, INC.	18.93
15	VIRGIN ISLANDS TELEPHONE CORPORATION	18.00
16	HORRY TELEPHONE CO.	17.13
17	ROCK HILL TELEPHONE COMPANY	16.25
18	SUGAR LAND TELEPHONE CO.	15.89
19	ALLTEL GEORGIA PROPERTIES	15.63
20	WARWICK VALLEY TELEPHONE COMPANY	15.39
21	ALLTEL MISSOURI PROPERTIES	14.63
22	ALLTEL FLORIDA, INC.	14.08
23	WESTERN RESERVE TELEPHONE COMPANY	13.35
24	TELEPHONE UTILITIES EXCHANGE CARRIER ASSO	13.29
25	NATIONAL EXCHANGE CARRIER ASSOCIATION	12.34
26	PUERTO RICO TELEPHONE COMPANY	12.26
27	CHILLICOTHE TELEPHONE COMPANY, THE	11.54
28	LANCASTER TELEPHONE COMPANY	10.73
29	ALLTEL OKLAHOMA PROPERTIES	10.62
30	ROSEVILLE TELEPHONE COMPANY	10.33
31	**INTELSAT**	**9.14**
32	ILLINOIS CONSOLIDATED TELEPHONE COMPANY	9.07
33	ANCHORAGE TELEPHONE UTILITY	8.03

INTELSAT Rate of Return is calculated from its Annual Report. Rate of Return equals Operating Income after tax divided by Avg Plant and Other Property.

Non Price Cap companies Rate of Return from 'Rate of Return Report' as of April 1998. Companies shown in report without 'total rate of returns' were eliminated.

INTELSAT's Return on Investment

	1992	1993	1994	1995	1996	1997
Comm. Plant and Other Property	2,402,967	2,625,731	3,012,458	3,233,465	3,114,794	3,276,045
Average Investment		2,514,349	2,819,094	3,122,962	3,174,130	3,195,420
Operating Income pre Tax		329,844	304,814	367,315	433,990	429,656
Operating Income after Tax - see below		212,149	203,230	253,192	294,689	291,905
Return on Investment - Pre Tax		13.12%	10.81%	11.76%	13.67%	13.45%
Return on Investment - After Tax		8.44%	7.21%	8.11%	9.28%	9.14%

Calculation of Operating Income After Tax	1993	1994	1995	1996	1997
Telecomm Revenue	658,167	706,250	805,432	911,361	961,619
Operating Exp	328,323	401,436	438,117	477,371	531,963
Operating Income	329,845	304,814	367,315	433,990	429,656
Tax Expense Calculation					
Interest Expense	28,060	44,342	74,693	76,808	76,448
Taxable Income	301,784	260,472	292,622	357,182	353,208
Tax Rate	39%	39%	39%	39%	39%
Tax Expense	117,696	101,584	114,123	139,301	137,751
Operating Income (above)	329,845	304,814	367,315	433,990	429,656
Tax Expense (above)	117,696	101,584	114,123	139,301	137,751
Operating Income After Tax	212,149	203,230	253,192	294,689	291,905

Data obtained from INTELSAT's Annual Reports

The FCC's Methodology for Calculating Rate of Returns

The FCC defines the rate of return as after-tax operating income divided by average net investment. Operating income is defined as total operating revenue less operating expenses less taxes (federal and other). Net investment is defined as the average over the year of total plant-in-service and other investment less total reserves (depreciation).

The data presented here is based on FCC Report 43-01, which may be found in the FCC's ARMIS system. The data is based on costs and revenue for interstate activities of the telephone companies identified.

INTELSAT's Rate of Return

The INTELSAT returns were calculated based on the income statements and balance sheets as presented in its Annual Reports. The rate of return was defined to be the after-tax operating income divided by the average communications plant and other property. After-tax operating income was defined to be INTELSAT's operating income less estimated taxes at COMSAT's current rate. Average communications plant and other property was calculated by taking the sum of the beginning balance as of January 1 and the ending balance as of December 31 in each year and dividing by two.

Comparison of INTELSAT to Telephone Companies as Reported by the FCC

The FCC divides the telephone companies into two categories, price capped and non-price capped. In total there were 75 price capped and 32 non-price capped companies. Comparing INTELSAT's rate of return to the price capped companies, INTELSAT would rank 72nd in 1997, with only four companies showing a lower return. Among non-price capped companies, INTELSAT would rank 31st out of 33 companies in 1997. Adding both lists together, INTELSAT would rank 102nd out of 108 companies, with only six companies showing a lower return.

Estimated Total Surcharge

($000)

1997 INTELSAT Rate of Return - as calculated from Annual Report	9.14%
Weighted Avg. Price Caped Rate of Return for 1997 (from FCC Report)	15.64%
Increase Required for INTELSAT to Match Avg. Price Capped	6.50%
INTELSAT Avg Comm Plant and Equipment (1997)	3,195,420
Increase in Rate of Return Required	6.50%
Increase in Operating Revenue Required to Obtain Avg. Return	207,859
Increase in Revenue Required to Obtain Avg. Return	207,859
Current COMSAT Tax Rate	39.00%
Required Pre Tax Increase in Revenue to Obtain Avg. After Tax Return	340,752
1997 INTELSAT Telecommunication Revenue	961,619
Increase in Operating Revenue Required to Obtain Avg. Return	340,752
Total Revenue Required	1,302,371
Surcharge Required for Additional Revenue	35.44%
Surcharge for Signatory Functions	10.44%
Total Surcharge	45.88%

Rate of Return Calculation for INTELSAT

($000)

		1997 *	Revenue Increase	1997 after Adj.
Telecommunications Revenue		$ 961,619	$ 340,752	$ 1,302,371
Operating Expenses				
Operations and Development		131,989		131,989
General and Administrative		26,658		26,658
Depreciation		373,316		373,316
Total Operating Expense		$ 531,963		$ 531,963
Operating Income		429,656	340,752	770,408
Tax Expense (see Tax Calculation below)		137,751		270,644
Operating Income After Tax		$ 291,905		$ 499,764
Comm. Plant and Other Property	1997	$ 3,276,045		
	1996	$ 3,114,794		
Avg. Comm. Plant and Other Property		$ 3,195,420		$ 3,195,420
After Tax Rate of Return on Communications Plant and Other Property		9.14%		15.64%

Tax Calculation

	1997 *	Adj.	Adj. 1997
Telecommunications Revenue	$ 961,619	$ 340,752	$ 1,302,371
Total Operating Expense	531,963		531,963
Operating Income	429,656		770,408
Interest Expense	(76,448)		(76,448)
Pre-Tax Income	353,208		693,960
Tax Rate	39%	39%	39%
Tax Expense (Pre-Tax Income times Tax Rate)	$ 137,751	$ 132,893	$ 270,644

* Data are from the 1997 INTELSAT Annual Report

Investing Signatory Surcharge

Estimate for COMSAT

Average 'Capital Employed (outside of Intelsat)	$	31,033,160
After Tax Rate of Return		12.48%
Total Return	$	3,872,938
Depreciation on COMSAT Assets (Annualized)		7,776,636
Taxes on Return		1,510,446
Estimated Signatory Function Expenses		3,004,603
Total of COMSAT Costs	$	16,164,624
Estimated 1998 IUC Payments to Intelsat	$	154,770,000
Percentage of IUC Payments		10.44%

SIGNATORY FUNCTION SURCHARGE

The approach to estimating a Signatory surcharge employed in this exhibit is to calculate a revenue requirement. The revenue requirement consists of depreciation, return, and taxes on COMSAT assets related to its INTELSAT business, and operating expenses incurred in performing the functions of an investing Signatory. Not addressed is the burden of COMSAT's potential commercial liabilities as the continuing US investor in and Signatory of INTELSAT.

The assets that are included in the "rate base" are mostly satellite insurance premiums that COMSAT paid independently of its contribution to insurance obtained by INTELSAT. 25% of the value of COMSAT's headquarters building is also included. The return is calculated at 12.48% after-tax on a two-point average rate base for 1998. The corporate income tax rate assumed is 39%.

Operating expenses have been estimated based not only a continuing need to attend INTELSAT meetings and perform the so-called INTELSAT affairs function, but also on a continuing need to monitor INTELSAT's operational, planning, spacecraft procurement, and "commercial" activities. This estimate is based on our knowledge of the activities of individual COMSAT departments as they relate to INTELSAT.

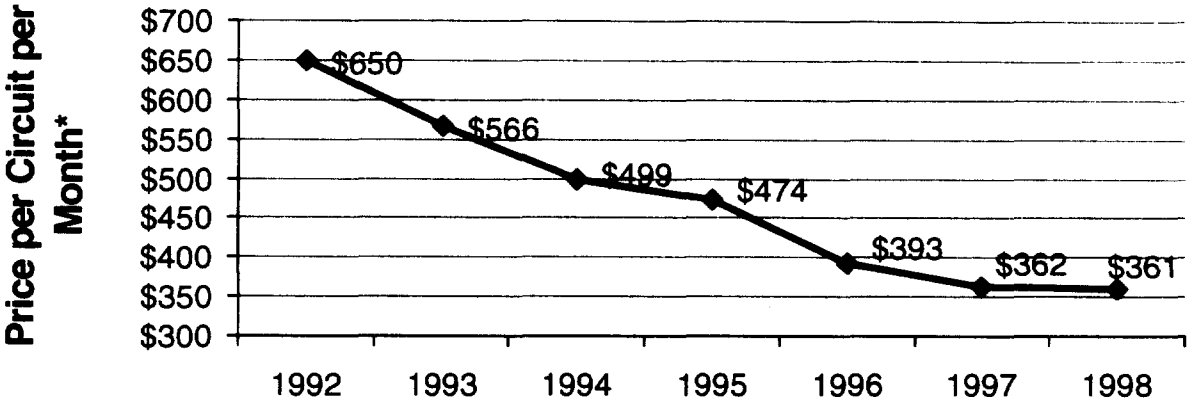
Return, taxes, depreciation, and operating expenses sum to $16.2 million which represents a 10.4% increase relative to COMSAT's estimated 1998 INTELSAT utilization charge payments.

ATTACHMENT 2

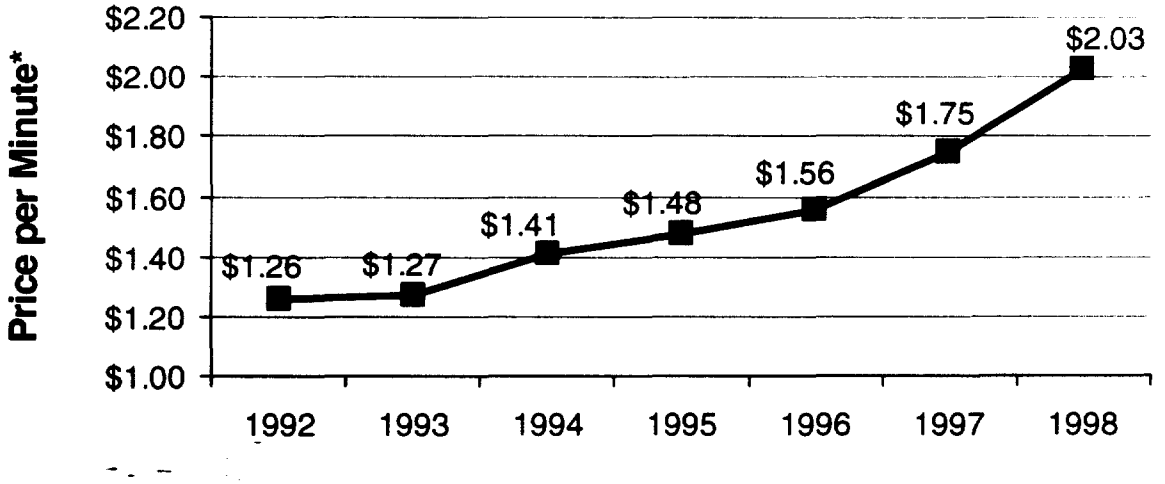
Attachment

COMSAT's Rates to Retail Carriers Decrease While Those Carriers Increase Rates to Callers

COMSAT Rate Reductions to AT&T, MCI, and Sprint



Average Cost per Minute for Basic International Calls on AT&T, MCI, and Sprint



Assumptions / Caveats

Rates are basic Dial 1 outbound services for residential and business customers. Customers with optional calling plans or under promotional rates or credits would likely have lower rates than here. Data are typical rates for year stated. Other rates may also have been in effect during stated year. 1998 data on revised chart is average rate in effect 12/1/98 (actually after 10/16/98). Rates shown are average of 28 countries with highest total minutes billed in US in FCC 1995 data (excluding Canada and Mexico). Costs to each country are weighted by 1995 average length to that country. The 28 countries used to compile these averages together accounted for 71.3% of total non-Canada/ Mexico international minutes billed in US in 1995. All rate data here comes from these FCC tariffs: AT&T FCC #1; MCI FCC #1; Sprint FCC #1. Rates shown here are typically used by small users. Average rate for each type of call/carrier is weighted by 1995 total minutes billed in US for calls to each country. Residential rates weighted as 25% Standard, 60% Discount, 15% Economy. Business rates weighted as 85% Standard, 10% Discount, 5% Economy. Overall combined weights Res/Bus 50%/50%. Overall averages for Big Three carriers weighted by FCC's 1995 Net International Telephone Revenue per carrier. Sprint Business Dial 1 has not been available to new customers since 7/30/95; some customers may still be on it. It is used here (as are all basic Dial 1 services) for continuity.